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Sharon Gillett
Chief
Wireline Competition Bureau
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: *Preserving the Open Internet*, GN Docket No. 09-191

Dear Sharon:

This letter summarizes our call yesterday concerning the press release Level 3 issued yesterday afternoon, and follows up on questions you posed to us during that call.

As we explained yesterday, despite Level 3's effort to portray its dispute with Comcast as being about an "open Internet," it is nothing but a good old-fashioned commercial peering dispute, the kind that Level 3 has found itself in before. Notwithstanding Level 3's claims, this is not about online video, it is not about "paid prioritization," it does not involve putting "toll booths" on the Internet, and it is not about net neutrality. Indeed, if anything, it is Level 3 that is seeking "non-neutral" treatment that would favor *its* network traffic over those of all its competitors.

Taking a step back from this dispute, it is important to start with how the Internet works today. As you know, when Network A (an Internet backbone provider) wants to connect with Network B (another Internet backbone provider), it can either ask Network B for free "peering" (i.e., the direct exchange of traffic between the two networks), or purchase services from Network B. Networks like Comcast maintain peering policies (www.comcast.com/peering) that set forth the business and technical criteria for defining another network as a peer. Settlement-free peering is typically appropriate when each carrier sends a roughly balanced level of traffic to the other's network.¹

In a circumstance where Network B sends traffic to Network A that is significantly out of balance with the traffic it receives from Network A, however, Network B is expected either to remedy the situation or to pay something to Network A to compensate for that imbalance (that "something" is known as "settlements").

¹ In this context, network operators routinely consider traffic at a 2:1 ratio to be roughly balanced.

Content delivery networks (“CDNs”), such as Akamai, Limelight, and Amazon CloudFront, are not Internet backbone providers. Their business involves sending significantly more traffic than they receive. For that reason they typically purchase services (“paid interconnection”) from Internet backbone providers. This description is *not* just relevant to how Comcast operates – rather, it is a characterization of the way the Internet market works, here and around the world.

The dispute between Comcast and Level 3 relates to how Level 3 wants Comcast (and presumably other networks) to treat their new influx of CDN traffic, but it has nothing whatsoever to do with any *content, application, or service* that Level 3 is transmitting. This concerns only the vast increase in the *amount* of traffic Level 3 told Comcast that it wants to send to Comcast’s network on a “peering” basis. Given that this will throw traffic between the two networks grossly out of balance, and in keeping with long-established settlement practices on the Internet backbone, Comcast has asked Level 3 to enter into commercial negotiations to achieve a solution that accounts for this new and significant traffic imbalance.

Despite Level 3’s complaints, Comcast is neither resisting carrying Internet video traffic nor imposing new “tolls” on Internet video traffic. The simple fact is that Comcast terminates huge amounts of online video traffic to our high-speed Internet customers, most of it pursuant to longstanding, mutually acceptable commercial arrangements we have in place with the leading CDN companies. Our customers get access to all the online video they want, along with any other Internet content, application, or service they choose – regardless of its source. And, regardless of how this dispute turns out, that will continue to be the case.

But Level 3 is trying to game the process of peering – one that has worked well and consensually, without government interference, for over a decade – in order to gain a unique and unfair advantage for its own expanding CDN service. Level 3’s problem apparently arises out of the fact that it recently won a bid to become one of Netflix’s primary CDN providers – in competition with the major national CDNs that already send Netflix and other traffic to Comcast’s network. In order to undercut its CDN competitors, Level 3 wants to avoid the commercial arrangements other CDN companies use to terminate traffic onto Comcast’s and other providers’ networks, and instead force Comcast to accept *its* CDN traffic for free, under a “peering” relationship. This is not how peering works, here or anywhere in the world. What Level 3 is suddenly pushing – a “new theory” of peering – would throw the traditional, “balanced traffic” peering rulebook out the window, give Level 3 an unfair cost advantage over its competitors, and shift all of the costs from Level 3 and its content customers onto Comcast and its high-speed Internet customers.

Until Level 3 fomented this dispute, Comcast and Level 3 exchanged Internet traffic as part of a commercial interconnection agreement, under which *Comcast paid Level 3* for interconnection facilities. Although the parties exchanged traffic at a ratio of about 2:1, with Comcast terminating more of Level 3’s traffic,² this was well within the industry’s established bounds for “roughly balanced” traffic, and they exchanged their on-net traffic on a settlement-free basis. At some point, we are told, some of the traffic sent by Level 3 to Comcast came from CDN services operated by Level 3. Because this traffic was within the traditional industry criteria for “roughly balanced,” this did not raise any issues for Comcast.

² You asked what on-net, settlement-free traffic Comcast might have sent to Level 3 under this arrangement. This could have included traffic sent from any Comcast customer to enterprise and other customers served by Level 3.

Now, Level 3 has decided to reinvent itself as a major CDN, in competition with other commercial CDN players, all of whom pay for transmission of their traffic on Comcast's and others' networks. And in so doing, Level 3 would more than *double* the amount of traffic it sends to Comcast – which would result in a traffic imbalance that could be in the range of about 5:1.

The parties' current interconnection facilities³ could not begin to support that type of traffic flow. As a result, Level 3 approached Comcast approximately two weeks ago (shortly after reaching their Netflix agreement, we later learned, although they made no mention of it at the time) and demanded 27 to 30 new interconnection ports, which would allow them to send a much greater amount of traffic onto Comcast's network.⁴ To that request, Level 3 added the following twist: it insisted that Comcast should provide it with all those new facilities – and support this vast new influx of traffic – for free.⁵

Comcast was able to scramble and provide Level 3 with six ports (at no charge) that were, by chance, available and not budgeted and forecasted for Comcast's wholesale commercial customers. The amount of traffic that would be exchanged over these six ports (and the parties' preexisting ports) was just barely within the generally accepted bounds of a roughly balanced traffic exchange between the parties. Level 3 accepted those ports, and they are using them right now to send traffic to Comcast's network.

The additional ports Level 3 requested – and the traffic to be exchanged over that large number of ports -- *would* put the traffic ratio between the parties far out of balance. As a result, Comcast explained to Level 3 that it would be willing to provide additional ports on a commercial wholesale basis (just as it does with Level 3's CDN competitors).⁶ Comcast offered Level 3 twenty ports under a commercial arrangement, but it informed Level 3 that it had to commit quickly if it wanted to ensure that these ports were committed to its business, before another commercial customer submitted a competing order. This makes Level 3's statement that Comcast's offer was "take it or leave it" patently absurd. In fact, Comcast tried to help Level 3 secure as much capacity as possible, as quickly as possible, given time and business constraints. The agreement Comcast offered Level 3 would also facilitate Level 3's ordering additional ports as soon as those become available in the new calendar year.

As Level 3 reports, it has in fact entered into a commercial ports agreement with Comcast (in addition to receiving the six free ports). Level 3's statement that it has done so "under protest" is

³ Comcast obtained 27 ports from Level 3 under that preexisting relationship.

⁴ You asked us to explain what is involved in provisioning a port. Providing new ports requires incremental 10 GigE interfaces, line cards, router slots, and optical backhaul capacity. Supporting a new port involves capital costs of about \$50,000 and ongoing recurring costs of about \$25,000 a year. The issue here, however, is not the initial cost of the ports, but the ongoing costs involved in carrying imbalanced traffic over the long term.

⁵ We understand that Level 3 made the same request to other broadband network providers, some of which are similarly surprised at the unusual demand; there may be other cases where a network has pre-existing CDN peering arrangements that would allow Level 3's request.

⁶ In answer to a question you raised with us, the six free ports and the 20 new ports were offered to Level 3 without regard to the type of traffic delivered over those ports. In other words, this was entirely service/application agnostic, and designed purely to handle the volume of new traffic.

entirely disingenuous. To be sure, Level 3 would prefer to force Comcast into arrangements that give it all the ports it wants for free. That's a great strategy for Level 3 to undermine all of its CDN competitors, which have long done business based on commercial wholesale arrangements, not just with Comcast but also with other network providers. Level 3's preferred arrangement would also allow it to enter into its new CDN venture at little cost to Level 3 or its customers, while shifting its costs to Comcast and *its* broadband customers. Most importantly, as noted above, this would do nothing to increase the amount of online video traffic on the network or affect the accessibility of online video to Comcast's customers, who already have robust access to CDN delivery of the *precise same content*. It would simply produce improved margins for Level 3.

Level 3 has been on the opposite end of exactly such a dispute repeatedly over the past several years, including as recently as a few months ago. It has been quick to decry an arrangement such as the one it wants with Comcast as an unfair "subsidy" that is unsuitable for the type of settlement-free peering it demands here. When Level 3 realized that Cogent was "sending far more traffic to the Level 3 network than Level 3 was sending to Cogent's network," it revised the parties' relationship and insisted on negotiating a more balanced arrangement.⁷ In Level 3's own words,

To be lasting, business relationships should be mutually beneficial. In cases where the benefit we receive is in line with the benefit we deliver, we will exchange traffic on a settlement-free basis. Contrary to [other ISPs] public statements, reasonable, balanced, and mutually beneficial agreements for the exchange of traffic do not represent a threat to the Internet. They don't represent a threat to anyone other than those trying to get a free ride on someone else's network.⁸

In Comcast's case, Level 3 has low-balled its way into a new business deal that will significantly increase the amount of Level 3's traffic Comcast would carry, and suddenly wants to seriously disrupt the settled economics of Internet traffic to meet its new business plan. Its position is not based on any principles of fair-play on the Internet, but instead is merely the result of its rash bid to carry Netflix traffic at radically low rates, based on the flawed assumption that it could use its Tier 1 Internet backbone status to cram its CDN traffic onto others' networks on a settlement-free basis.

All that said, we have not given up hope that Level 3 will make a reasonable business decision in the context of the parties' overall commercial relationship. To that end, and in that spirit, we have continued to have discussions with Level 3 as recently as this morning. Commercial resolution is the appropriate path forward here: Level 3 itself has expressly stated that "regulatory scrutiny" should not

⁷ See Level 3 Issues Statement Concerning Internet Peering and Cogent Communications (Oct. 7, 2010), <http://www.prnewswire.com/news-releases/level-3-issues-statement-concerning-internet-peering-and-cogent-communications-55014572.html> (abandoning settlement-free peering relationship with Cogent because "Cogent was sending far more traffic to the Level 3 network than Level 3 was sending to Cogent's network. It is important to keep in mind that traffic received by Level 3 in a peering relationship must be moved across Level 3's network at considerable expense. Simply put, this means that, without paying, Cogent was using far more of Level 3's network, far more of the time, than the reverse. Following our review, we decided that it was unfair for us to be subsidizing Cogent's business.")

⁸ *Id.*

apply to these types of arrangements.⁹ As Level 3 has explained, Internet backbone facilities and “high capacity connections to facilities of content and application providers... are robustly competitive, service elements are unbundled and purchases are generally made by enterprises with substantial buying power.”¹⁰

Nevertheless, if we are unable to resolve the issues satisfactorily in these conversations, we would be pleased to participate in a meeting between the parties overseen by and with the participation of Commission staff if that will facilitate a better understanding of the matters at issue.

Please let me know if you have further questions.

Sincerely,

/s/ Joseph W. Waz, Jr.

Joseph W. Waz, Jr.
Senior Vice President, External Affairs
and Public Policy Counsel

/s/ Lynn R. Charytan

Lynn R. Charytan
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⁹ Level 3 *Ex Parte* Letter re: Meeting Between James Crowe, CEO of Level 3, John Ryan, Assistant Chief Legal Officer of Level 3, and Commissioners Copps, McDowell, Clyburn, and Baker and Their Staffs, GN Docket No. 09-191, attachment at 2 (Nov. 10, 2009).

¹⁰ *Id.*